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AUTHOR Harry, Keith
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ABSTRACT

A case study of the correspondence course unit at the University of Nairobi, an Open University school, is presented. Areas of discussion include characteristics of the country, the educational system provided by the Government of Kenya, and the correspondence course unit. Specific topics include: the physical setting of Kenya; communications; the political situation; instructional methods and media; course development; student admission, registration and records; student guidance; student assessment and testing; organization and administration of the university; and resources. (SW)

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UNIVERSITY OF NAIROBI

A case study in distance learning systems:

UNIVERSITY OF NAIROBI CORRESPONDENCE COURSES UNIT

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Keith Harry

1978

HE 012 499

The Correspondence Course Unit, University of Nairobi

Contents

PART A : The Country 1

PART B : Educational System 5

PART C : The Correspondence Course Unit

1. Origins 9
2. Who For? 9
3. What Courses? 9
4. What Methods and Media? 11
5. Course Creation 11
6. Course Production 12
7. Course Distribution 12
8. Student Admission, Registration, Records.. 13
9. Student Support 13
10. Assessment and Examination 13
11. Organisation and Administration 13
12. Control 14
13. Resources 15

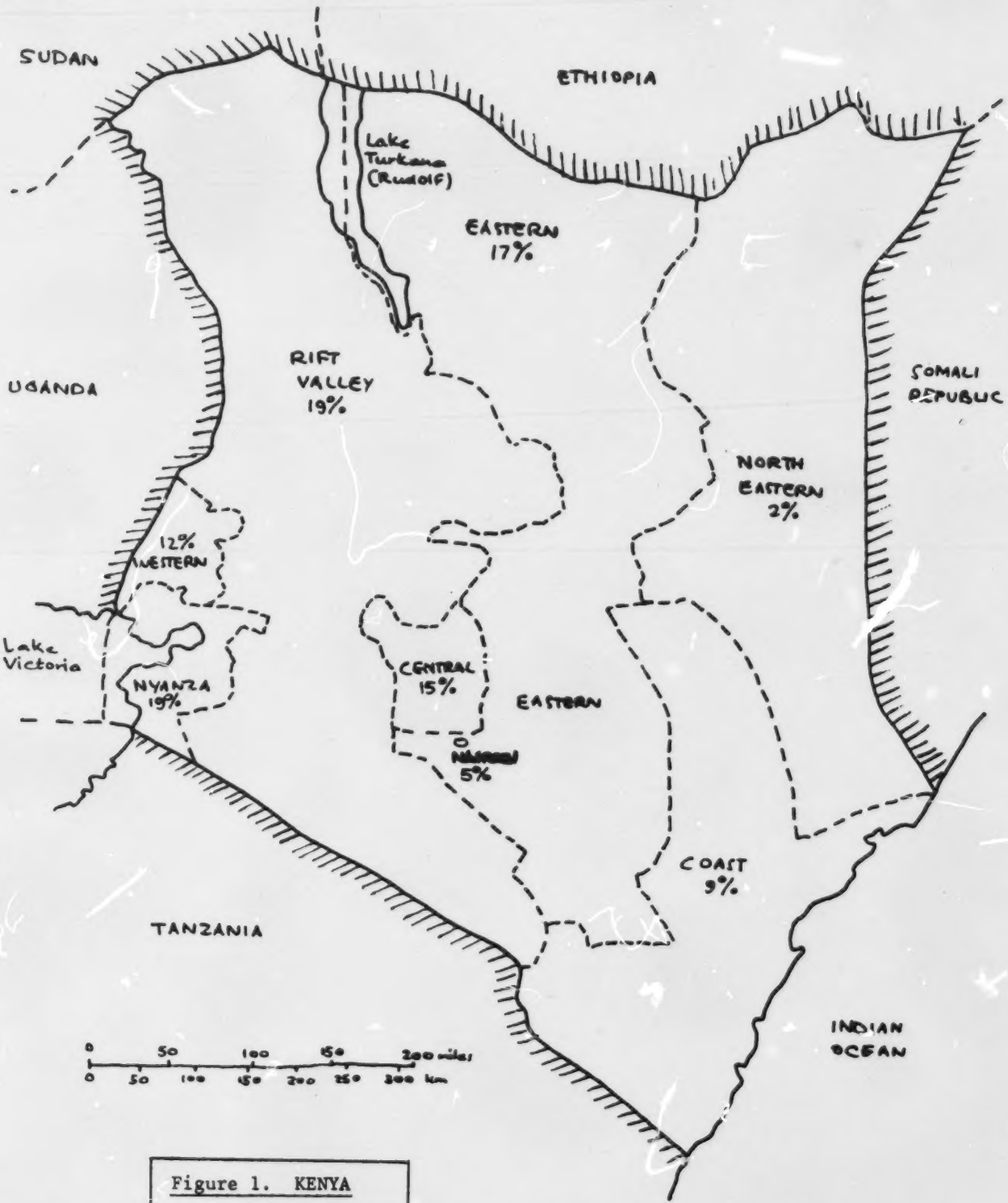


Figure 1. KENYA

showing distribution of population (1975)

PART A

THE COUNTRY

Physical Setting

1. The Republic of Kenya is situated on the east coast of Africa, almost exactly astride the equator. The country has a coastline on the Indian Ocean and is bounded by Ethiopia and Sudan to the north, the Somali Democratic Republic to the north east and by Uganda and Tanzania to the west and south. It covers an area of 583,000 km^2 (225,000 square miles). Over half the country, mainly in the north and north east, is desert or semi-desert. The southern part is fertile; the low-lying land of the coastal belt slopes gradually up to about 5,000 feet, then levels out to the Great Plains at the edge of which lies the capital, Nairobi, only to rise again to about 7,500 feet at the edge of the Rift Valley, a natural fault which runs through much of East and Central Africa. In low lying areas, particularly along the coast, the climate is hot and humid, but on the plateau and in the highlands it is temperate.

Population

2. At mid 1977 the total population was estimated at 14,300,000 (the last census was in 1969). Africans numbered 10,733,202 out of the 1969 total population of 10,942,705. The Asian population (139,000 in 1969) is now estimated at around 100,000 due to the emigration of non-citizens. The 1969 figure of 40,000 Europeans is also probably too high; the numbers have declined fairly steadily from a peak of 69,000 in 1960, just before Independence. The only other numerically significant minority in 1969 was the Arab population of 27,886. Over 50% of the present total population are thought to be under the age of 15. Swahili (known locally as Kiswahili) became the official language in 1974 but English is in general use. On the coast the Arabs and Swahili predominate, farther inland the races speaking Bantu languages, and non-Bantu tribes, such as the Luo, the Nandi and Kipsigis, the Masai, the Somali and the Gallas.

3. Figure 1 shows the percentage distribution between Nairobi district and the 7 provinces as estimated in 1975. By far the largest centres of population are Nairobi (700,000) and Mombasa (340,000). Although the Rift Valley province has the largest population of any province it is also the largest in area and has a population density of 13 persons per km^2 against 745 per km^2 in Nairobi district. Only 17% of Kenya's total area is suitable for cultivation and over 80% of the population are concentrated in the south western quadrant.

4. The population growth rate is estimated to be 3.5% per annum.

The economy

5. Since Kenya attained Independence in 1963 after 70 years as a British colony, its economy has maintained a high rate of growth, averaging 6.8% per annum. In 1975 the GNP stood at K£1.261 billion, but with a per capita income of around K£95 per annum Kenya is a poor developing country with large disparities in income distribution. These disparities are accounted for by levels of regional development arising largely from the colonial past and also to some extent by geographical factors. During the colonial period the economic organization of Kenyan society involved

extensive farming by Europeans. This earned, in addition to an income for Europeans, exports, foreign exchange and tax revenues for the Colonial government. A division of labour evolved in parallel in which Asians performed the tasks of tradesmen and shopkeepers and Africans of unskilled labourers. Discriminatory legislation and institutions preserved this socio-economic organization, and were reinforced by stratified and unequal school systems. In addition, colonial practice was to keep rural wages low while at the same time offering relatively higher wages in towns where goods and services demanded by the European settler and administrative classes were produced. (K£1 = £0.72, June 1978)

6. A dual economy developed: the formal sector was characterised by capital intensive, relatively large-scale production of goods and services for the high income groups, and the informal sector was characterised by reliance upon indigenous resources and small-scale production of goods and services consumed largely by low-income groups. By Independence this dualism had established the model lifestyle to which all who acquired certain academic qualifications could aspire. The positions of departing European administrators, together with the wealth, power and prestige which accompanied them, were filled by those with the necessary educational credentials. The new indigenous elite had a vested interest in the perpetuation of imbalance, based on socio-economic opportunity instead of race.

7. Agriculture is the backbone of the Kenyan economy and normally accounts for 30% of the GDP. In addition, coffee, tea, pyrethrum, sisal and various horticultural products constitute 60% of Kenya's exports. Over two thirds of the population earn their living from the land although less than one fifth of the total land area receives sufficient rainfall to sustain agricultural production. Since Independence in 1963 great strides have been made in providing Africans with land through a Land Transfer Programme.

8. The economy is mixed; the government is increasingly taking a controlling interest in major concerns but there is no question of nationalization, and private enterprise and foreign investment are actively encouraged. The 1974-78 Development Plan has to some extent been overtaken by the rising price of oil and has been criticised by the World Bank which has pointed out that its objectives are at variance with the strategies put forward by the operational ministries.

9. The industrial sector is growing fast, particularly in the fields of food processing/fruit canning, dairy products and brewing, but still forms a relatively small part of the economy. Other industries include paper, tobacco, rubber, textiles and clothing, chemicals, petroleum products, footware and cement. The mining sector is of growing importance. After agriculture, tourism is Kenya's main source of foreign exchange. In 1974 and 1975 the rate of growth was sharply reduced, largely due to increased prices of oil and commodities. The economy recovered strongly in 1976, growth increased to over 5% and the rate of inflation levelled out. The high price of tea and coffee on world markets contributed to Kenya earning its highest ever export revenue. Since 1977, coffee, tea and other export prices have fallen, and a deeper and deeper trade deficit has resulted.

Communications

10. The Kenya Railways Corporation operates 2,426 km of railways. The network links Nairobi with the port of Mombasa to the south east and with Nakuru, Eldoret and eventually Uganda to the north west. There are branch lines from Nakuru to Kisumu, from Nairobi to Nanyuki and also to other up-country towns.

11. Kenya has 50,400 km of classified roads, of which 4,400 km are bitumen surfaced. Of the remaining roads the majority are of earth and gravel on which traffic is liable to interruption or delay in wet weather. Most roads in the large towns are bitumen surfaced. Buses and coaches operate everywhere but services are not yet well-developed outside the towns.

12. The Eastern African National Shipping Line, established by Kenya, Tanzania, Uganda and Zambia in 1966, has four vessels operating, with a total gross tonnage of just under 40,000, and charters ships from other lines. Mombasa port serves Uganda, Tanzania, Rwanda, Burundi and Zambia as well as Kenya.

13. Air travel and air freight are well developed, with airports at Mombasa, Wilson (Nairobi), Malindi and Kisumu and innumerable airstrips in addition to the newly modernised international airport at Embakasi. Mombasa airport has recently been developed to international standard. With the winding up of EAA in 1977, Kenya Airways was established and operates on international as well as domestic routes.

14. Responsibility for the former East African Posts and Telecommunications Corporation, which handles local services, and its subsidiary, East African External Telecommunications, which handles communications with the world outside East Africa, has been taken over by the Ministry of Power and Communications. Mail is not delivered to homes or offices but is collected from P.O. Boxes rented by private individuals or by employers. In 1975 there were 113,688 telephone subscribers.

15. The Voice of Kenya is an independent public service body responsible to the Ministry of Information and Broadcasting for both radio and television broadcasting throughout the country. VOK transmits radio programmes in English, Swahili and vernacular languages from Nairobi, Mombasa and Kisumu. Of the estimated 1.4 million receivers in use (1973) (64 per 1,000 people), 6,000 are installed in public places for community listening. VOK Television broadcasts from Nairobi and Mombasa with boosters to increase coverage. 38,000 receivers were estimated to be in use in 1973 with 850 installed for community viewing.

16. There are four daily morning newspapers, two in English and two in Swahili, as well as several weekly, monthly and other periodicals. Daily average newspaper circulation in 1977 totalled 150,800.

The political situation

17. Legislative power rests with the National Assembly, which originally had two chanbers. In 1966 the House of Representatives and the Senate amalgamated with a total of 170 seats. The President combines the functions of Head of State and Prime Minister. He chooses his Vice-President and a Cabinet of Ministers from among the members of the National Assembly to which they are collectively responsible. To all intents and purposes Kenya is a one party state and all MPs are members of the Kenya African National Union (KANU). However, parliamentary seats are contested vigorously at General Elections.

18. The evolution of modern Kenya has taken place in the last 70 years or so. British colonial administration was established only in the last decade of the nineteenth century. Political development was to a large extent confined to the European and Asian communities until after the end of the second World War. It was not until the 1950s that African nationalism developed as an effective force; the Mau Mau uprising,

generally referred to as the Emergency, lasted from 1952 to 1960. As a result the tempo of development was stepped up. Internal self-government was achieved under KANU in June 1963 and Independence followed in December 1963. Twelve months later the Republic of Kenya became a member of the Commonwealth. Following the death of Jomo Kenyatta, the Kikuyu first President, the Vice President Daniel arap Moi who belongs to the Kalenjin group of tribes but has strong Kikuyu support, became President in 1978.

PART B

THE EDUCATIONAL SYSTEM

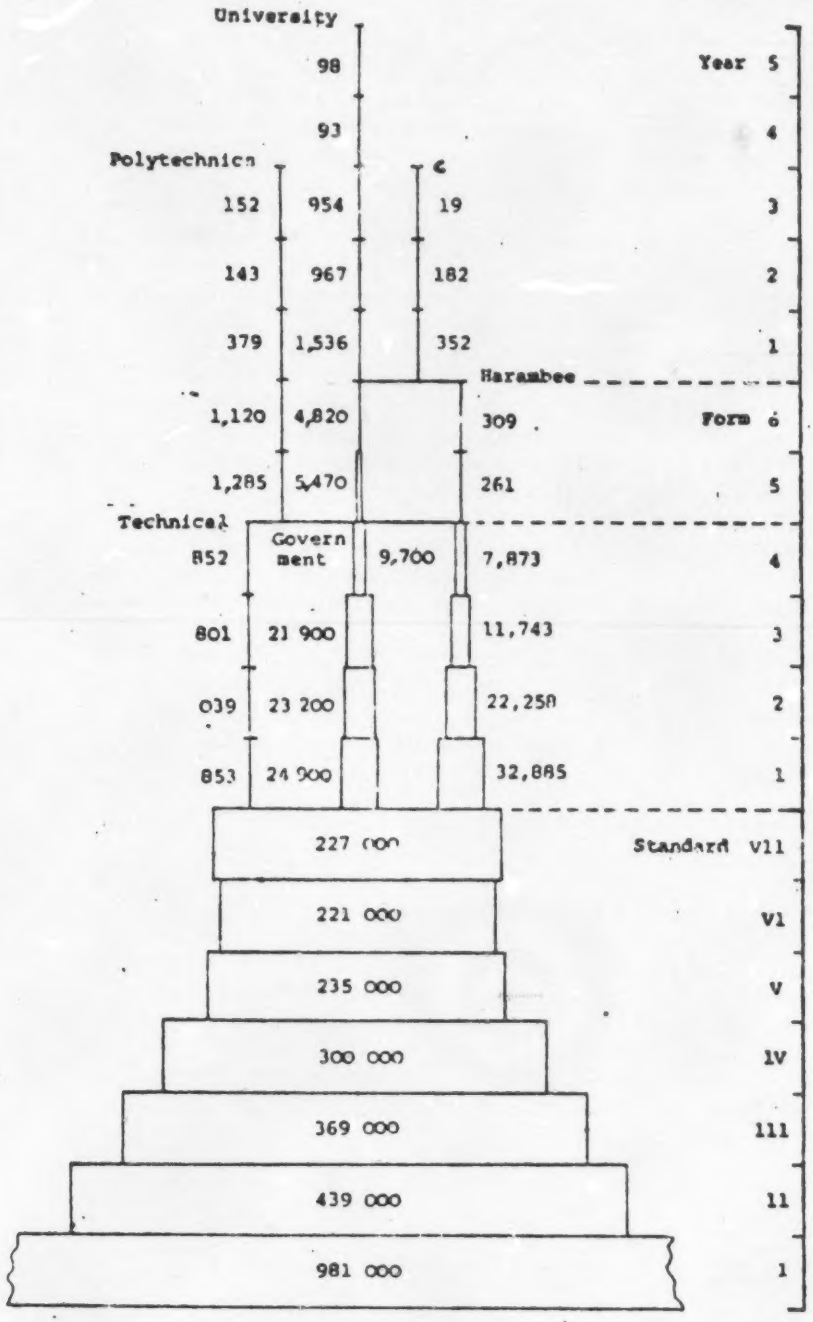
19. The Minister for Education is responsible to the President and Cabinet, with whom educational policy rests. The Education Act of 1968 was passed to 'provide for the regulation and progressive development of education'. Government policy on education is detailed in Development Plans which run for periods of 5 years.

20. The aims of the Government of Kenya are stated as: 'The expansion of educational opportunities; the production of high level manpower; and the promotion of national unity'. In the Development Plan for the 1974-1978 period the Government states that the 'highly selective nature (of the system) and (its) exclusive orientation towards the modern urban sector are in fundamental contradiction to the social and cultural values upheld by the Government'. The same document drew attention to the growing seriousness of the school-leaver problem and the failure of the formal system to equip its products 'with the skills and qualities required by the economy'.

21. Before Independence, the administration of education in Kenya was not uniform; the colonial statutes dictated 3 school systems, segregated by race - European, Asian and African. According to the Kenya Education Commission Report of 1964 (the Ominde Report), 'during the ten years before Independence, more capital was invested in European and Asian education, representing 3 per cent of the population, than in the education of the African 97 per cent'. In 1964, 98.9% of European and 80.9% of Asian students attended secondary school, while only 1.3% of African students had this opportunity.

22. The colonial government showed little interest in African education until 1911, when it established the Department of Education. The government focussed on technical and industrial training for Africans and missionary schools emphasised religious studies. With the rise of nationalism in Kenya, the government was forced to re-evaluate Kenya's educational system. Africans had to be trained in appropriate fields to meet the demands of nation building that independence required; an upgrading of the educational system took place between 1956 and 1963. Beginning in 1963, the year of independence, the system witnessed further changes. The Ominde Commission reported and all its 160 recommendations were enacted; 'From now on, we in Kenya must go our own way'.

Figure 3. Kenyan Enrolments 1973-74



a primary figures for 1974
b secondary figures for 1973
c Kenyatta University College

Source: H.W.R. Hawes et al. (1976) An African primary curriculum survey. Country profile: Kenya, London, Institute of Education

23. Education in primary and secondary school is not compulsory, but since 1974 education during the first four years of primary school has been free. In 1973 most of the primary school pupils (a total of 1,800,476) were enrolled in government maintained schools; only about 1% (15,541) attended government-assisted or unaided schools. In contrast, enrolment figures at the secondary level show that 75,000 pupils out of a total enrolment of 184,000 attended unaided schools, a development which may reflect the growth of Harambee (self-help) schools, which are locally supported schools without government assistance.

24. Since independence, enrolments have increased substantially at every level. At the primary level, in 12 years enrolments have more than doubled, while in the same period secondary enrolments have quadrupled. In numerical terms the greatest expansion has occurred at the primary level since it is both the base of the educational pyramid and the level of schooling more readily accessible to those of low socio-economic status. Increasing enrolments have pushed up the level of expenditure on education at a rate which cannot be sustained without severely hampering other programmes crucial for economic development. In 1975/76, expenditure on education and training was about 7.2% of the GDP, compared with an average of 3.9% for all countries. The 1974-78 Development Plan states the necessity of holding constant the share of the budget allocated to education and training.

25. For the majority of Kenyan children, primary education is their only education. Of the 50% who actually complete the basic 7-year cycle of primary education, only 25% continue to some kind of formal secondary education. The high fees are an important factor as also is the emphasis on certification as the means of access from one level to the next. For example, of the 29,000 candidates for the East African Certificate of Education (EACE) in 1972 only 4,000 were admitted to form 5. The EACE selects students likely to continue in higher education at university and college levels.

26. There are at present 17 teacher training colleges. Currently two categories of teachers are trained for primary schools. A P1 teacher must achieve a minimum of a pass in 4 or more subjects of the EACE before entry to training, and a P2 teacher a pass in 5 or more subjects of KJSE. Both undergo 2 full years of training in a college, and both categories are trained in the same college. Before 1974 it was possible for teachers to obtain promotion from one grade to the next by passing examinations, but a quota system has been introduced and an examination by a school inspector is an additional necessity for teachers wishing promotion.

27. To implement Kenya's policy of expansion, well-qualified primary school teachers in particular are desperately needed. Kenya has been obliged to employ tens of thousands of unqualified or poorly qualified teachers, and the task of providing these teachers with in-service training and further education has been and is a daunting one. In 1968 there were 10,000 unqualified teachers and 17,000 with only the lowest qualification (P3), out of 38,000 teachers employed. In 1977 there were 30,000 unqualified teachers and 16,000 P3 teachers, out of some 87,000 employed.

28. Secondary school teachers are trained at the following levels and institutions (1975):

Figure 4.

		1975 Output
S1	Kenyatta University College	150
BEd	Kenyatta University College	160
DipEd	Kenyatta University College	145
S1	Kenya Science Teachers College	150
BEd	Faculty of Education	200
PGDE	Faculty of Education	35

29. The University of Nairobi was opened in 1954 as the Royal Technical College of East Africa, and in 1961, as Royal College, Nairobi, was affiliated with the University of London. East African degrees were established in 1962 and the University of East Africa was formed in 1963, consisting of University College, Nairobi, Makerere University College, Uganda, and University College Dar es Salaam, Tanzania. The arrangement was dissolved in 1970 when each of the 3 institutions became nationally autonomous. The 1974-78 Development Plan's stated aim to make higher education more relevant to the nation's manpower requirements means (1) emphasis on sciences and mathematics-related courses, (2) obligatory participation by university students in activities in the rural sector for one year during their university career, and (3) expansion of adult education.

36. After 1974 a new programme was designed by CCU and the Kenya Institute of Education to upgrade 5,000 teachers, most of whom possessed the East African Certificate of Education (EACE) which is normally obtained after four years of secondary education. As a result of the course of three-way teaching, consisting of a) correspondence texts, b) short residential courses, marking and commenting on written assignments, face-to-face tuition, c) radio broadcasts, 4,200 students sat the final examination in 1977.

37. In 1977 CCU developed courses in 7 subjects for EACE. The University of Nairobi has considered and accepted in principle the introduction of first degrees by external studies following a feasibility report by a team from the UKOU. Teaching and the conduct of examinations will be carried out by the relevant faculties while the administration of the programme will be done by the CCU. Business education courses have just been introduced.

4. What methods and media?

38. The following forms of instruction have been used by CCU in their courses for teachers:

- correspondence study guides with self-test questions and details of written assignments.
- textbooks from commercial publishers.
- maps, sets of mathematical instruments, science experiment kits.
- marking of assignments sent to CCU (all course materials sent by post)
- radio broadcasts on Voice of Kenya linked to one or two lessons per course each week.
- short residential courses and occasional face-to-face tuition.

5. Course creation

39. The Unit employs seven correspondence tutors (1977) who write some of the study guides and edit others which are written by the fifty teachers in and around Nairobi who are part-time lesson authors and script-markers. The CCU study guides are textbook-based, are mostly 12 lessons

long and are expected to include around 3 months work. There are six study guides for each subject, each one corresponding to the work of one school term.

40. Lessons include 'self-test questions', and alternate lessons include details of written assignments which must be answered and posted to CCU for marking. Experiments are introduced in science subjects; in physical science, for example, the main focus of the lessons is on experimentation.

41. Each course is supervised by a subject tutor, who is a full-time university academic and a trained and experienced teacher of his subject. One of his jobs is to recruit the part-time tutors who mark assignments and participate in residential and field courses.

6. Course production

42. Study guides are printed; CCU is equipped with its own printing, duplicating and binding facilities. The whole production process is overseen by the course editor.

Radio lessons are recorded by CCU staff in their own studio, under the direction of the radio/television tutor. Among the three science courses so far in existence (1977), programmes have been prepared only for the KJSE biology course. Programmes are intended to be supplementary to study guides.

Science kits contain simple but important chemicals and apparatus. In addition, the student is usually given guidance on how to use locally available materials to complement the kit's content.

7. Course distribution

43. CCU relies on correspondence as the main link with its students. Students are sent through the post study materials, administrative forms and pre-addressed return envelopes designed to speed up the return of marked assignments. CCU receives from the student his written assignments and any letters he may have for the student counsellor, subject tutor, administration, etc.

44. Radio lessons are broadcast free of charge over the Voice of Kenya every day between 5.15 and 6.00 p.m.

8. Student Admission, Registration and Records

45. The University of Nairobi Institute of Adult Studies Prospectus 1977-1978 outlines enrolment procedure. Prospective students apply for an enrolment form and submit it together with the appropriate fee for their course or courses to CCU either by post or through personal visit to the Nairobi Campus or the Kikuyu Campus. Enrolment takes place throughout the year and students complete their courses at their own pace.

9. Student Support

46. Unlike a number of other institutions involved in distance education, CCU does not maintain regional tutorial centres. The study guides which form the backbone of its courses are reckoned to take the place of tutors. But there is some contact between staff and students. CCU tutors usually make joint arrangements with either the Extra-Mural Division or the Education Officers to meet CCU students and potential students out in their districts in the form of public meetings. Occasionally, students visit the Unit. Short residential courses take place on the University campus in August. These enable, for example, science tutors to show to students apparatus and chemicals which cannot be sent to them in the science kit.

10. Assessment and Examination

47. Written assignments are set in alternate lessons in the study guides; they are marked and returned to students, but they are not taken directly into account when the decision is made to sit for an examination because the decision is made by the student. Concessions have been made to CCU students; school pupils are required to pass KJSE in one sitting whereas CCU students have been allowed to pass individual papers at separate sittings. All examinations are national examinations.

11. Organisation and Administration

48. The CCU is one of the three divisions of the Institute of Adult Studies in the University of Nairobi; the others are the Extra Mural Division, which runs evening classes and public lectures, and the Adult Studies Centre, which houses the Institute's diploma course in adult education and organises short residential courses. Each division is headed by an assistant director, whose job is mainly administrative. The remaining members of CCU staff are

seven correspondence tutors, a course development tutor, who plans new courses and evaluates the on-going programme, a radio/television specialist who writes and records radio lessons, a course editor, who sees the courses through the production process, plus various administrative and clerical staff. CCU maintains its own registration, mailing, records and accounts sections.

12. Control

49. Academic control. CCU courses are completely based on nationally and internationally determined syllabuses and examinations.

Financial control. The initial costs of setting up the Unit were met mainly by a grant from USAID, but the Ministry of Education now takes complete responsibility for CCU financing, through the University budget. Student fees are currently (1977) K£10.00 for each subject, which is less than a quarter of the actual cost. Science courses are more costly than others, and especially so in physical science where the kit alone costs K£2.50, and where enrolments are relatively low. These additional costs are shared among fees for all the courses.

Project control.

Quality control. Evaluation of current courses is the responsibility of the course development tutor. A considerable number of revised editions of study guides have appeared, for various reasons. First, errors, ambiguities and obsolete information were removed in the light of students' experience. Second, the Ministry's

curricula have evolved very quickly, particularly in the more nationally orientated subjects of history and geography. Third, commercially available textbooks, supplied to students enrolled with the Unit as essential for their courses, were changed from time to time as new editions or better texts appeared. No evaluation of science courses has yet been done, but work will begin shortly on a study which will concentrate on examining how far the combination of the kit with the other elements has been successful in overcoming the problem of experimentation.

A number of studies of students' performances have been carried out by members of CCU, and a major evaluation of the cost-effectiveness of the Unit was recently made by David Hawkridge and others.

13. Resources

50. Staff. The staff membership of CCU is enumerated under 'Administration and Organization'.

Buildings and equipment. CCU occupies two office buildings on the Institute of Adult Studies Kikuyu Campus. As well as its own printing facilities, the Unit has a self-contained radio recording and production studio and a small science laboratory. These buildings were financed by the Danish Government in 1970, as were six houses built at Kikuyu for rent to staff members.

Money. At the start of the project (1967-70) USAID paid for three American specialists from the University of Wisconsin to work in Nairobi, at a total cost of nearly $500,000.

The Hawkridge report examines costs at CCU in great detail and reaches the conclusion that although it has achieved its objectives so far, in order to be cost effective, the Unit should be enrolling a larger student population. On the other hand, it appeared unlikely that the same results could have been achieved more cheaply by other means. Figures 6 and 7 indicate the sources of finance during the first 10 years of CCU and the total costs of the project.

Figure 6. Finance of the Project

Source	K£1977	Percent
Kenyan Government	1,162,510	68.8
Danish Government	32,090	1.9
United States Government	368,000	21.8
Students	126,400	7.5
Total	1,689,000	100.0

Unit. : Constant K£

		1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
	Production	3320	4380	5650	8750	8330	8060	8580	8430	7940	7970
RADIO	Transmission	12960	21600	28800	28800	28800	28800	21600	21600	21600	21600
	Total	16280	25980	34450	37550	37130	36860	30180	30030	29540	29570
	Production(a)	56590	62920	69450	42830	38380	35340	35080	32320	26400	26300
PRINTED OR WRITTEN	Production(b)	111940	125030	141950	42830	38380	35340	35080	32320	26400	26300
MATERIALS	Reproduction	16260	76650	73410	70440	58670	47900	64400	37250	20510	23300
	Distribution	6630	19600	18600	17900	16900	13400	17500	11250	6260	6850
	Total (a)	79480	159170	161460	131170	114150	96640	116980	80820	53170	56450
	(b)	134830	221280	233960	131170	114150	96640	116980	80820	53170	56450
RESIDENTIAL	Session	4420	6000	5960	6130	5560	5210	5090	5050	4120	4500
ADMINISTRATION		5800	5990	9690	10340	10340	11380	11380	10770	8990	8920
TOTAL	(a)	105980	197140	209400	184540	167180	149250	163630	126670	95820	99440
	(b)	161330	259250	281900	184540	167180	149250	163630	126670	95820	99440

(a) With American aid at the Kenyan rate

(b) With American aid at the American rate

Figure 7. Total Cost of the Teacher Training Project

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